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A Fax containing a total of 4 pages, including this cover page, is being transmitted. In the event that you do not receive all the pages, please contact James of Walters Ready Mix at (208) 356-5491 or Fax Number (208) 356-5553 immediately.

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Department of Environmental Quality  
State Air Program

**Air Dispersion Modeling Protocol – Concrete Batch Plant – Walters Ready Mix**

**Proposed Project:** (provide brief description, e.g., 150 cy/hr, 200,000 cy/yr portable batch plant)

**Location:** (if portable, identify initial location)

- 1) An emissions inventory (EI) developed by DEQ based on the plant's capacity and proposed maximum daily and annual operations will be included with the application, and will comply with the following:
  - a. Emissions will be calculated using AP-42 emission factors and good engineering judgement.
  - b. Fugitive emissions sources will be included in the EI, except for emissions resulting from vehicle traffic and wind erosion from storage piles.
  - c. The level of emissions control assumed for each source will be clearly specified.
  - d. Cr+6 will be presumed to comprise 20% of the total chromium emissions from cement silo filling, and 30% of the total chromium emissions from cement supplement (flyash) silo filling.
- 2) The proposed project will meet all of the criteria specified below, and Walters Ready Mix Inc. agrees to accept permit conditions requiring continuing compliance with the physical parameters and setback distance(s) described in Table 1. Walters Ready Mix Inc. is requesting that the DEQ generic model results be used to demonstrate preconstruction compliance with NAAQS and TAPs for this project. No additional modeling analysis will be submitted for this project.

**Table 1. CRITERIA FOR USING DEQ's CONCRETE BATCH PLANT GENERIC MODELING RESULTS FOR AIR IMPACT ANALYSES**

Parameter	DEQ Generic Modeling Assumptions					Proposed Project
Concrete batch plant type and capacity	Truck mix (redi-mix or dry mix) or Central mix					Hagan Portable 200 cyd/hr 200,000 cyd /yr 50,000 cyd/yr requested
Operation in any PM <sub>10</sub> nonattainment area	Not proposed.					
Presence of an electric generator.	No generator. Line power is available.					Cummins dsl. Fired model DFAB 230 kW
<u>No Collocation.</u> Minimum distance from nearest edge of any emissions source to any other source of emissions, including another concrete batch plant, hot mix asphalt plant, or rock crushing plant.	200 meters (656 feet)					Requesting to collocate with another batch plant
Number of cement and/or cement supplement storage silos	Not limited. The model layout assumes all silo emissions are from the same point, and that cement/supplement is not transferred between storage silos.					
Maximum daily concrete production (cy/day)	1,500	2,400	3,600	4,800		1500
<u>Minimum Setback Distance.</u> Minimum distance from nearest edge of any emissions source to a receptor. <sup>a</sup>	40 m (131 ft)	60 m (197 ft)	100 m (328 ft)	150 m (492 ft)		
Maximum annual concrete production (cy/year)	300,000	400,000	500,000	500,000		50,000
<u>Cement and supplement storage silo baghouse(s)</u> Minimum stack height (height above ground) Minimum PM/PM <sub>10</sub> control	10 meters (32.8 ft) 99%					34 ft. 99.995
<u>Weigh hopper loading baghouse, or equivalent</u> Minimum stack height (height above ground) Minimum PM/PM <sub>10</sub> control	10 meters (32.8 ft) 99%					19.5 ft. 99.8
<u>Truck-mix loadout or Central Mix loading.</u> Minimum PM/PM <sub>10</sub> control.	95% Boot enclosure, shroud, water sprays, or baghouse/cartridge filter					
<u>Transfer Point Fugitives.</u> Minimum PM/PM <sub>10</sub> control.	75% Water sprays, enclosures, shrouds, or aggregate/sand is damp on an as-received basis and used before significantly drying out.					Moisture in aggregate

## Air Dispersion Modeling Protocol – Concrete Batch Plant – Walters Ready Mix

**Proposed Project:** (provide brief description, e.g., 150 cy/hr, 200,000 cy/yr portable batch plant)

**Location:** (if portable, identify initial location)

- 1) An emissions inventory (EI) developed by DEQ based on the plant's capacity and proposed maximum daily and annual operations will be included with the application, and will comply with the following:
  - a. Emissions will be calculated using AP-42 emission factors and good engineering judgement.
  - b. Fugitive emissions sources will be included in the EI, except for emissions resulting from vehicle traffic and wind erosion from storage piles.
  - c. The level of emissions control assumed for each source will be clearly specified.
  - d. Cr+6 will be presumed to comprise 20% of the total chromium emissions from cement silo filling, and 30% of the total chromium emissions from cement supplement (flyash) silo filling.
- 2) The proposed project will meet all of the criteria specified below, and Walters Ready Mix Inc. agrees to accept permit conditions requiring continuing compliance with the physical parameters and setback distance(s) described in Table 1. Walters Ready Mix Inc. is requesting that the DEQ generic model results be used to demonstrate preconstruction compliance with NAAQS and TAPs for this project. No additional modeling analysis will be submitted for this project.

**Table 1. CRITERIA FOR USING DEQ's CONCRETE BATCH PLANT GENERIC MODELING RESULTS FOR AIR IMPACT ANALYSES**

Parameter	DEQ Generic Modeling Assumptions				Proposed Project
Concrete batch plant type and capacity	Truck mix (redi-mix or dry mix) or Central mix				Stationary, 150 cyd./hr 300,000 cyd./yr.
Operation in any PM <sub>10</sub> nonattainment area	Not proposed.				
Presence of an electric generator.	No generator. Line power is available.				
<u>No Collocation.</u> Minimum distance from nearest edge of any emissions source to any other source of emissions, including another concrete batch plant, hot mix asphalt plant, or rock crushing plant.	200 meters (656 feet)				Requesting to collocate with another batch plant (part time) and crusher
Number of cement and/or cement supplement storage silos	Not limited. The model layout assumes all silo emissions are from the same point, and that cement/supplement is not transferred between storage silos.				
Maximum daily concrete production (cy/day)	1,500	2,400	3,600	4,800	1500
<u>Minimum Setback Distance.</u> Minimum distance from nearest edge of any emissions source to a receptor. <sup>a</sup>	40 m (131 ft)	60 m (197 ft)	100 m (328 ft)	150 m (492 ft)	
Maximum annual concrete production (cy/year)	300,000	400,000	500,000	500,000	200,000 max. (actual)
<u>Cement and supplement storage silo baghouse(s)</u> Minimum stack height (height above ground) Minimum PM/PM <sub>10</sub> control	10 meters (32.8 ft) 99%				65 ft. 99.995
<u>Weigh hopper loading baghouse, or equivalent</u> Minimum stack height (height above ground) Minimum PM/PM <sub>10</sub> control	10 meters (32.8 ft) 99%				35 ft. 99.995
<u>Truck-mix loadout or Central Mix loading.</u> Minimum PM/PM <sub>10</sub> control.	95% Boot enclosure, shroud, water sprays, or baghouse/cartridge filter				
<u>Transfer Point Fugitives.</u> Minimum PM/PM <sub>10</sub> control.	75% Water sprays, enclosures, shrouds, or aggregate/sand is damp on an as-received basis and used before significantly drying out.				Moisture in aggregate

## Air Dispersion Modeling Protocol – Concrete Batch Plant – Walters Ready Mix

**Proposed Project:** (provide brief description, e.g., 150 cy/hr, 200,000 cy/yr portable batch plant)

**Location:** (if portable, identify initial location)

- 1) An emissions inventory (EI) developed by DEQ based on the plant's capacity and proposed maximum daily and annual operations will be included with the application, and will comply with the following:
  - a. Emissions will be calculated using AP-42 emission factors and good engineering judgement.
  - b. Fugitive emissions sources will be included in the EI, except for emissions resulting from vehicle traffic and wind erosion from storage piles.
  - c. The level of emissions control assumed for each source will be clearly specified.
  - d. Cr+6 will be presumed to comprise 20% of the total chromium emissions from cement silo filling, and 30% of the total chromium emissions from cement supplement (flyash) silo filling.
- 2) The proposed project will meet all of the criteria specified below, and Walters Ready Mix Inc. agrees to accept permit conditions requiring continuing compliance with the physical parameters and setback distance(s) described in Table 1. Walters Ready Mix Inc. is requesting that the DEQ generic model results be used to demonstrate preconstruction compliance with NAAQS and TAPs for this project. No additional modeling analysis will be submitted for this project.

**Table 1. CRITERIA FOR USING DEQ's CONCRETE BATCH PLANT GENERIC MODELING RESULTS FOR AIR IMPACT ANALYSES**

Parameter	DEQ Generic Modeling Assumptions					Proposed Project
Concrete batch plant type and capacity	Truck mix (redi-mix or dry mix) or Central mix					1975 Rex lo go portable 150cyd./hr. 150,000 cyd./yr.
Operation in any PM <sub>10</sub> nonattainment area	Not proposed.					
Presence of an electric generator.	No generator. Line power is available.					Cummins onan dsl. fired 450 kW
<u>No Collocation.</u> Minimum distance from nearest edge of any emissions source to any other source of emissions, including another concrete batch plant, hot mix asphalt plant, or rock crushing plant.	200 meters (656 feet)					Requesting collocation with another batch plant
Number of cement and/or cement supplement storage silos	Not limited. The model layout assumes all silo emissions are from the same point, and that cement/supplement is not transferred between storage silos.					
Maximum daily concrete production (cy/day)	1,500	2,400	3,600	4,800		1500
<u>Minimum Setback Distance.</u> Minimum distance from nearest edge of any emissions source to a receptor. <sup>a</sup>	40 m (131 ft)	60 m (197 ft)	100 m (328 ft)	150 m (492 ft)		
Maximum annual concrete production (cy/year)	300,000	400,000	500,000	500,000		50,000
<u>Cement and supplement storage silo baghouse(s)</u> Minimum stack height (height above ground) Minimum PM/PM <sub>10</sub> control	10 meters (32.8 ft) 99%					38 ft. 99.6%
<u>Weigh hopper loading baghouse, or equivalent</u> Minimum stack height (height above ground) Minimum PM/PM <sub>10</sub> control	10 meters (32.8 ft) 95%					
<u>Truck-mix loadout or Central Mix loading.</u> Minimum PM/PM <sub>10</sub> control.	Boot enclosure, shroud, water sprays, or baghouse/cartridge filter 75%					
<u>Transfer Point Fugitives.</u> Minimum PM/PM <sub>10</sub> control.	Water sprays, enclosures, shrouds, or aggregate/sand is damp on an as-received basis and used before significantly drying out.					Moisture in aggregate.